Algebra/Topology Seminar

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Adjunctions + Commutative Cubes = Embedded Manifolds

Thursday, February 19, 2026
3:00 p.m. in Massry B012

ABSTRACT. Adjoint functors play an important role in several areas of math, both as foundational and as computational tools. The notion of an adjunction can be generalized to higher categories and has a surprising connection to manifold topology via the cobordism/tangle hypothesis. This requires understanding how to freely add adjunctions: in joint work with Martina Rovelli, we explain how to do this and the connection with (oriented) manifolds. The talk is meant to be accessible, with no special background needed besides a basic familiarity with categories.